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Otter Products IP: Todd Adelman			LIN, HANG	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KURT E. SPEARS

Appeal 2016-002909
Application 13/893,963¹
Technology Center 2600

Before BRUCE R. WINSOR, MICHAEL M. BARRY, and
MICHAEL J. ENGLE, *Administrative Patent Judges*.

ENGLE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1–29. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

Technology

The application relates to “determining a location of a stylus on a planar surface.” Abstract.

Illustrative Claim

Claim 1 is illustrative and reproduced below with the limitations at issue emphasized:

¹ Appellant says the real party in interest is Otter Products, LLC. App. Br. 2.

1. A system for determining a location of a stylus on a planar surface, the system comprising:

a first optical source positioned at a first source location, the first optical source configured to rotationally sweep a first optical beam along the planar surface, wherein *the first optical beam is modulated with a first encoded data sequence that varies with time*;

a second optical source positioned at a second source location, the second optical source configured to rotationally sweep a second optical beam along the planar surface, wherein *the second optical beam is modulated with a second encoded data sequence that varies with time*;

a stylus containing at least one optical receiver, the stylus configured to:

receive the first optical beam and the second optical beam;

demodulate the first encoded data sequence from the first optical beam; and

demodulate the second encoded data sequence from the second optical beam;

and electrical circuitry configured to:

determine a first angular relationship between the stylus and the first source location based on the demodulated first encoded data sequence;

determine a second angular relationship between the stylus and the second source location based on the demodulated second encoded data sequence; and

calculate coordinates of the stylus on the planar surface based on the first angular relationship, the second angular relationship, the first source location, and the second source location.

Rejections

Claims 1–3, 10, 11, 13, 17–20, and 22–29 stand rejected under 35 U.S.C. § 102(a)(2) as anticipated by Usuda et al. (US 6,437,314 B1; Aug. 20, 2002). Final Act. 2.

Claims 4–9, 12, 14–16, and 21 stand rejected under 35 U.S.C. § 103 as obvious over the combination of Usuda and various other references. Final Act. 15–21.

ISSUE

Did the Examiner err in finding Usuda discloses an “optical beam is modulated with a . . . encoded data sequence that varies with time,” as recited in claim 1?

ANALYSIS

Anticipation: Claims 1–3, 10, 11, 13, 17–20, and 22–29

Claim 1 recites “the [first / second] optical beam is modulated with a [first / second] encoded data sequence that varies with time.”

The Examiner relies on Usuda for disclosing these limitations. Ans. 3 (citing Usuda 7:59–8:16). However, we agree with Appellant that Usuda’s beams do not contain data sequences that vary with time. App. Br. 6. Usuda operates by “moving an otherwise unvarying optical beam across a surface at a constant rate” (Reply Br. 6), which allows a controller to calculate the time lag between the start of the sweep and the time when the stylus detects the beam. Usuda 7:59–8:5. Because the beam moves at a constant rate, the time when the stylus is hit can be used to calculate the angle of the beam when the stylus is hit, and by determining the angles for two separate beams, the (x, y) position coordinates of the stylus can be calculated. Usuda 7:67–8:35. However, Usuda does not disclose any data sequence in the beam itself. Contrary to the Examiner’s finding of a “time delay contained in the scanning beam” (Ans. 3), the time delay is not data in the beam itself but rather is calculated as discussed above. The Examiner has not made a prima

facie case that the beam itself comprises any data sequence that varies with time.

Accordingly, we do not sustain the Examiner's rejection of claim 1, and claims 2, 3, 10, 11, 13, 17–20, and 22–29, which depend from claim 1 or contain commensurate limitations.

Obviousness: Claims 2–9, 12, 14–16, and 21

Appellant contends claims 2–9, 12, 14–16, and 21 are allowable “for at least the same reasons as claim 1.” App. Br. 9–10. The Examiner relies on the same findings regarding Usuda for both anticipation and obviousness, and has not addressed whether obviousness makes up for the deficiencies of Usuda discussed above. Therefore, we agree with Appellant for the reasons discussed above for claim 1. *See In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988) (“Dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious.”).

Accordingly, we do not sustain the Examiner's rejection of claims 2–9, 12, 14–16, and 21.

DECISION

For the reasons above, we reverse the Examiner's decision rejecting claims 1–29.

REVERSED